



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,697	12/07/2001	Katsuhisa Mochizuki	35.C16071	7655
5514	7590	06/27/2003		EXAMINER
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			LEWIS, MONICA	
			ART UNIT	PAPER NUMBER
			2822	

DATE MAILED: 06/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/005,697	MOCHIZUKI, KATSUHISA
	Examiner Monica Lewis	Art Unit 2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 11 April 2003.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 5,6,8 and 9 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 5,6,8 and 9 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on 11 April 2003 is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

1. This action is in response to the amendment filed April 11, 2003.

### *Response to Arguments*

2. Applicant's arguments with respect to claims 5, 6, 8 and 9 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 6 and 8 are rejected under 35 U.S.C. 103(a) as obvious over Applicant's Prior Art Figure in view of Yonezawa et al. (Japanese Patent No. 356130978) and Fetty (U.S. Patent No. 5,132,772).

In regards to claim 5, Applicant's Prior Art discloses the following:

- a lead (3) of a flexible wiring film comprising a lead (3) (For Example: See Figure 7);
- b) an image pickup element chip (2) electrically connected to the lead at an electrical connection point (4) (For Example: See Figure 7);
- c) a cover glass (1) for protecting a surface of the image pickup element chip (For Example: See Figure 7); and
- d) the lead, the image pickup element chip, and the cover glass are sealed in a peripheral portion of the image pickup element chip (For Example: See Figure 7).

In regards to claim 5, Applicant's Prior Art fails to disclose the following:

- a) ultraviolet curing resin.

However, Yonezawa et al. ("Yonezawa") discloses the use of ultraviolet curing resin (For Example: Abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the semiconductor device of Applicant's Prior Art Figure to include the use of ultraviolet curing resin as disclosed in Yonezawa because it aids in sealing and protecting the device (For Example: See Figure 11).

Additionally, since Applicant's Prior Art Figure and Yonezawa are both from the same field of endeavor, the purpose disclosed by Yonezawa would have been recognized in the pertinent art of Applicant's Prior Art Figure.

b) lead has a hole formed in a portion of the lead, the portion of the lead being between the electrical connection point and an outer end of the lead.

However, Fetty discloses the use of a lead with a hole (For Example: See Figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the semiconductor device of Applicant's Prior Art Figure to include the use of a lead with a hole as disclosed in Fetty because it aids in facilitating the bonding process (For Example: See Column 3 Lines 16-31).

Additionally, since Applicant's Prior Art Figure and Fetty are both from the same field of endeavor, the purpose disclosed by Fetty would have been recognized in the pertinent art of Applicant's Prior Art Figure.

In regards to claim 6, Applicant's Prior Art discloses the following:

- a) cover glass (For Example: See Figure 7).

In regards to claim 6, Applicant's Prior Art fails to disclose the following:

- a) at least a part of said hole.

However, Fetty discloses the use of a lead with a hole (For Example: See Figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the semiconductor device of Applicant's Prior Art Figure to include the use of a lead with a hole as disclosed in Fetty because it aids in facilitating the bonding process (For Example: See Column 3 Lines 16-31).

Additionally, since Applicant's Prior Art Figure and Fetty are both from the same field of endeavor, the purpose disclosed by Fetty would have been recognized in the pertinent art of Applicant's Prior Art Figure.

- b) ultraviolet-curing resin.

However, Yonezawa discloses the use of ultraviolet curing resin (For Example: Abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the semiconductor device of Applicant's Prior Art Figure to include the use of ultraviolet curing resin as disclosed in Yonezawa because it aids in sealing and protecting the device (For Example: See Figure 11).

Additionally, since Applicant's Prior Art Figure and Yonezawa are both from the same field of endeavor, the purpose disclosed by Yonezawa would have been recognized in the pertinent art of Applicant's Prior Art Figure.

In regards to claim 8, Applicant's Prior Art discloses the following:

a) at least one of a layer for preventing reflection of external light and a layer for preventing multiple reflection is formed between the lead and the cover glass (For Example: See Specification Page 2 Lines 14-27).

5. Claim 9 is rejected under 35 U.S.C. 103(a) as obvious over Applicant's Prior Art Figure in view of Yonezawa et al. (Japanese Patent No. 356130978) and Furukawa et al. (U.S. Patent No. 5,591,960).

In regards to claim 9, Fetty discloses the following:

a) an optical system (12) for focusing light on the image pickup apparatus (For Example: See Figure 7).

In regards to claim 9, Fetty fails to disclose the following:

a) a signal processing circuit for processing an output signal from said solid-state image pickup apparatus.

However, Furukawa et al. ("Furukawa") discloses the use of a signal processing circuit (For Example: See Column 5 Lines 14 and 15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the semiconductor device of Fetty to include the use of a signal processing circuit as disclosed in Furukawa because it aids in processing signal read out (For Example: See Column 4 Lines 46-67 and Column 5 Lines 1-20).

Additionally, since Fetty and Furukawa are both from the same field of endeavor, the purpose disclosed by Furukawa would have been recognized in the pertinent art of Fetty.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica Lewis whose telephone number is 703-305-3743. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on 703-308-4905. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722 for regular and after final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

ML

June 17, 2003



AMIR ZARABIAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800